What is claimed is:

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1. A calibration artifact for calibrating a machine vision measurement system, the calibration artifact comprising:

a substrate; and

a plurality of concentric rings on one surface of the substrate, each ring of a different pre-defined size.

2. The calibration artifact of claim 1 wherein the change in the size of any two adjacent rings is different than the change in size of any other two adjacent rings.

3. The calibration artifact of claim 1 in which each ring has an inner edge and an outer edge.

4. A method of calibrating a machine vision measurement system, the method comprising:

placing a calibration artifact including a series of concentric rings under a camera of the machine vision measurement system;

choosing a magnification level;

measuring the size of a first largest ring in pixels;

measuring the size of a second largest ring in pixels;

comparing the sizes; and

determining, from the comparison, the actual diameter of said ring.

5. The method of claim 4 in which each ring is of a pre-determined different size and wherein the change in the size of any two adjacent rings is different than the change in size between any other two adjacent rings.

6. The method of claim 4 further including determining a first average of the measured size of the first largest ring in pixels and the measured size of the second largest ring in pixels.

7. The method of claim 6 further including measuring the size of a third largest ring in pixels and determining a second average of the measured size of the third largest ring in pixels and the measured size of the second largest ring in pixels.

8. The method of claim 7 in which comparing includes using the first and

2 second averages.

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9. A calibration artifact for a machine vision measurement system, the calibration artifact comprising:

a substrate; and

a plurality of concentric shapes on one surface of the substrate, each shape of a different pre-defined size and wherein the change between the size of any two adjacent shapes is different than the change in size between any other two adjacent shapes.

10. A calibration system comprising:

a calibration artifact including:

a substrate; and

a plurality of concentric rings on one surface of the substrate, each ring of a different pre-defined size and wherein the change between the size of any two adjacent rings is different than the change between the size of any other two adjacent rings; and

a software algorithm including a database containing the size of each ring and data reflecting the change in size between each pair of adjacent rings

11. A method of calibrating a machine vision measurement device, the method comprising:

placing a calibration artifact including at least one ring with inner and outer edges under a camera of the machine measurement system;

choosing a magnification level;

measuring the size of the outer edge of the ring in pixels;

measuring the size of the inner edge of the ring in pixels; and

averaging the measured size of the outer edge of the ring and the inner edge of the ring.